WE CLAIM AS OUR INVENTION:

1.   A method for preparing an anatomical implant, comprising the steps of:

intra-operatively generating a three-dimensional dataset of body tissue of a

subject exhibiting a fault to be corrected by an implant from a series

of two dimensional projections of the body tissue obtained from

respectively different projection directions with a movable C-arm x-ray

apparatus, but moving an x-ray source and a radiation receiver on a

C-arm around said subject; and

intra-operatively preparing said implant adapted for introduction into said

subject from said three-dimensional dataset.

2.   A method as claimed in claim 1 comprising acquiring a three-dimensional dataset which represents a bone structure of said subject.

3.   A method as claimed in claim 1 comprising intra-operatively preparing said implant with an automated device which is supplied with said three-dimensional dataset.

4.   An apparatus for preparing an anatomical implant comprising:

a C-arm x-ray apparatus having a C-arm with an x-ray source and a radiation

receiver mounted thereon, said C-arm x-ray apparatus intra-

operatively generating a three-dimensional dataset of body tissue of

a subject exhibiting a fault, to be corrected with an implant, by

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obtaining a series of two-dimensional projections of the body tissue from respectively different projection directions by moving said C-arm, with said x-ray source and said radiation detector thereon, around the body tissue; and

an implant-producing device which intra-operatively produces said implant from said three-dimensional dataset.

5. An apparatus as claimed in claim 4 wherein said dataset represents a bone structure, and wherein said implant is adapted to replace said bone structure.

6. An apparatus as claimed in claim 4 wherein said implant-preparing device is an automated device which is supplied with said three-dimensional dataset and automatically prepares said implant therefrom.